

Project Title: To increase the representation and conservation of value of the Proteaceae collection through field work and propagation practices.

Level of Project: B-Tech / Advanced Diploma in Horticulture

Location of Research: Kirstenbosch National Botanical Garden, Cape Town

Horticultural Mentor: Mr Mashudu Nndanduleni

Background:

Kirstenbosch National Botanical Garden has been displaying the Proteaceae in the Garden for decades. Proteaceae is a complex collection and vary considerably in growth habit ranging from branched woody shrubs, trees, groundcovers and lithophytes. Some species have been propagated by seeds collected from the wild and some from the garden; and hybrids where identified through the seed collected from the garden. To maintain the pure genetic material in regards to species or localised varieties and forms, wild collections need to be collected and studied on a regular basis.

Proteas can be propagated by seeds or cuttings. The germination and rooting rate of each species vary from easy to tough. Plants easily hybridize in the garden and this make it impossible to collect the seed from the garden. Most Proteas are relatively short-lived in cultivation and need to be re-propagated from time to time. Most seedlings die in the collection nursery, and the best curation practices need to be researched to produce and maintain health collections.

Project aim:

- To increase representation of the collection of Protea species in the garden and mother stock by conducting field work and proper curating
- To propagate the collected seeds and finding the best methods of curating the collection in the nursery
- To improve the germination techniques and increase the horticultural potential of difficult proteas

This project is aimed at candidates that are interested in field collecting and plant propagation.

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